

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2004/050478

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06K19/073 G07F7/10 H04L9/06 G06F21/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06K G07F H04L G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 498 404 B1 (THUERINGER, ULLY, ARNOLD, EBER) 24 December 2002 (2002-12-24) cited in the application abstract; figure 2 column 2, line 39 - column 3, line 13	1-7
A	DE 198 28 936 A (SIEMENS AG) 2 December 1999 (1999-12-02) column 1, line 23 - line 30 column 2, line 15 - line 18	1
A	US 6 320 770 B1 (FEUSER MARKUS) 20 November 2001 (2001-11-20) cited in the application the whole document	1

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

4 August 2004

Date of mailing of the international search report

18/08/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 419 159 B1 (ODINAK GILAD) 16 July 2002 (2002-07-16) cited in the application column 3, line 31 - line 55; figure 1 -----	1
A	WO 00/63827 A (WEDER UWE ; INFINEON TECHNOLOGIES AG (DE)) 26 October 2000 (2000-10-26) cited in the application abstract page 4, line 26 - line 35 -----	1
A	DE 198 22 220 A (GIESECKE & DEVRIENT GMBH) 25 November 1999 (1999-11-25) column 1, line 51 - column 2, line 30 -----	1
A	DE 199 07 575 A (PHILIPS CORP INTELLECTUAL PTY) 24 August 2000 (2000-08-24) abstract column 1, line 5 - line 28 column 1, line 50 - line 56 column 4, line 61 - line 67 -----	1
A	PAUL KOCHER, JOSHUA JAFFE, BENJAMIN JUN: "Differential Power Analysis" 'Online! 1 January 2000 (2000-01-01), pages 1-16, XP002291002 SAN FRANCISCO, USA Retrieved from the Internet: URL: <a href="http://www.cryptography.com/dpa">http://www.cryptography.com/dpa</a> 'retrieved on 2004-08-03! page 1 - page 16 -----	1-7

# INTERNATIONAL SEARCH REPORT

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PCT/IB2004/050478

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6498404	B1	24-12-2002	DE 19850721 A1 CN 1292111 T WO 0026746 A2 EP 1057096 A2 JP 2003526134 T TW 460774 B	18-05-2000 18-04-2001 11-05-2000 06-12-2000 02-09-2003 21-10-2001
DE 19828936	A	02-12-1999	DE 19828936 A1 AT 227445 T BR 9910802 A CN 1303493 T WO 9963419 A1 DE 59903326 D1 EP 1280037 A2 EP 1080400 A1 JP 2002517787 T US 2003118190 A1	02-12-1999 15-11-2002 13-02-2001 11-07-2001 09-12-1999 12-12-2002 29-01-2003 07-03-2001 18-06-2002 26-06-2003
US 6320770	B1	20-11-2001	DE 19936919 A1 WO 0019366 A1 EP 1044426 A1 JP 2002526839 T	06-04-2000 06-04-2000 18-10-2000 20-08-2002
US 6419159	B1	16-07-2002	NONE	
WO 0063827	A	26-10-2000	WO 0063827 A1	26-10-2000
DE 19822220	A	25-11-1999	DE 19822220 A1 AU 4144399 A CA 2332350 A1 CN 1308752 T WO 9960534 A1 EP 1080454 A1 JP 2002516444 T	25-11-1999 06-12-1999 25-11-1999 15-08-2001 25-11-1999 07-03-2001 04-06-2002
DE 19907575	A	24-08-2000	DE 19907575 A1 AT 246819 T DE 50003153 D1 EP 1031903 A2 JP 2000253575 A US 6172494 B1	24-08-2000 15-08-2003 11-09-2003 30-08-2000 14-09-2000 09-01-2001